



The Raleigh Amateur Radio Society's **EXCITER**

GET INVOLVED

- RARS General Membership meeting: First Tuesday of the month.
- The RARS net meets every night @ 8 p.m. on 146.640.
- The RARS Technical & Trader's net: Saturdays @ 8:30 p.m. or following the RARS net.
- RARS meets for a monthly dinner on the 2nd Tuesday of each month.

PUBLIC SERVICE EVENTS

A huge thank you to everyone who provided communications, SAG vehicles, and other help at any and all of the events in which RARS participates. Check back here for 2013 public service events.

Celebrate the Season!

What: Annual Holiday Party & Officer Installation

Date: Tuesday, Dec. 4, 2012

Time: Potluck--7:00 p.m.; meeting--7:30 p.m.

Where: First Alliance Church, 4400 Buffaloe Rd., Raleigh, N.C.

We will have a snack potluck. Members can bring whatever snacks they wish to share. Click [here](#) to sign up. The club will provide drinks and tableware.

*Food, Drink, and Merriment * Bring Your Family!*

Special Request from the Vice President

I hope everyone had a wonderful Thanksgiving. Please head over to the RARS [website](#) and **sign up to bring a delicious snack** of some kind to the December 4th RARS Club meeting!

In lieu of a program, I am asking you to **please bring a non-perishable food donation**. The Club will donate all goods to First Alliance Church. We have much for which to be grateful, and if you are able to help, it will bring music to your heart!!

This one meeting of the year we will indulge in something that we love to do best. . . share favorite radio stories with ham friends old and new! Bring everyone, young and young at heart so they can meet all your cool ham friends! They'll want to become hams, too!

I look forward to seeing everyone! If there are questions please email CJ Orr at cjorr@bellsouth.net.

New Date for January 2013 Meeting!

The RARS General Meeting for January has been rescheduled from Tuesday, Jan. 1 to Tuesday, Jan. 8, Refreshments, 7:00 p.m.; meeting, 7:30 p.m. First Alliance Church



RARS Officers

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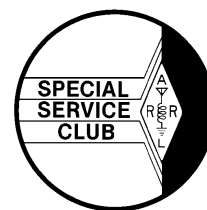
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The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the amateur radio community in the greater Triangle area. In 1999, the society incorporated a new RARS and obtained 501(c)(3) non-profit tax status.

The objectives of the club are to promote worldwide friendship through amateur radio; to be of public service by providing radio communications in times of disaster, emergency, or civic needs; to educate members in radio technique, and to provide training classes to assist in obtaining amateur radio licenses.



Anyone interested in amateur radio is eligible to apply for membership. Dues for regular licensed amateurs are \$18 per year (from July 1 through June 30). Additional immediate family members pay \$5 each per year. Dues for licensed amateurs older than 59 or younger than 16 are \$12 per year. Dues for non-licensed associate members are \$9 per year. Applications for membership may be obtained from the treasurer or on the RARS website (www.rars.org).

Exciter

The *Exciter* is the official newsletter of the Raleigh Amateur Radio Society. It appears each month as a PDF on the RARS website at www.rars.org. Members receive email notification when the latest version is available. Please provide your email address to the Treasurer.

The *Exciter* welcomes articles, advertisements, and other contributions. To submit a piece to the newsletter, please contact the Editor. The Editor reserves the right to edit any and all pieces. The submission deadline for each month's *Exciter* is the third Friday of the preceding month. All submissions must be final. Drafts are not accepted.

The views expressed in the *Exciter* are those of the individual authors and do not necessarily reflect the views of the Editor or RARS.

Cathy Downs, KA3QPU, editor (editor@rars.org)

For Your Information

RARS General Meeting

Date: First Tuesday of each month

Location: First Alliance Church
4400 Buffaloe Road
Raleigh, N.C.

Time: People begin arriving at 7 p.m.
The meeting officially begins at
7:30 p.m.

RARS Monthly Dinner

Join us on the second Tuesday of each month for the RARS dinner. It's open to everyone: RARS members, non-members, friends, and family. Feel free to bring your little ones! Dinner begins at 6:30 p.m.

Listen to the nightly RARS net and check www.rars.org for details on the next dinner's location.

RARS Repeaters in Raleigh

146.640 & 443.625 (88.5 PL)

Join us for the nightly RARS net at 8 p.m. on the 146.640 repeater. All hams holding a Technician class license or higher are invited to check in. We welcome both RARS and non-RARS members to the net.

VE Testing

The RARS VEs will accept walk-in testing at the February, May, August, and November RARS meetings; the RARSFest in April; the Cary Swapfest in July; the JARSFest in November; and following RARS license classes.

Please bring a photo ID, your current license, a copy of your current license, your \$14 exam fee, and any CSCEs you have for credit. Visit www.rars.org for more information.

Message from the President

It is hoped that you had, and will continue to have, great times during this holiday season!

Last week, Gale K4GGB and I visited our grandchildren in Virginia. During that trip, I accompanied my two older sons to the 30th Annual Dirty Dozen Bicycle Ride in Pittsburgh. It was pretty amazing to see the participants race/climb/suffer on paved city streets with grades up to 37 percent!

I was proud of them: they rode well, finished without injury, and want to return next year. And, they want me to train for the ride as well. This could be the beginning of a new (and more healthy) holiday tradition!

It is noted that the public service events for 2012 have been completed. On behalf of RARS, I thank you for your participation in public service. Your efforts have facilitated the events and made them safer for everyone. I am especially grateful for the capable and efficient leadership provided by John AI4RT, our Public Service Director, and his associates. Thanks, John!

In closing, it is hoped that you have a joyful and safe holiday season!

73, Karl W4CHX



Using a Gap Eagle DX antenna

By Larry Young, K4LXV

Most Radio amateurs have seen the ads or perhaps worked another ham using one of the Gap vertical antennas and wondered what was different about this type of antenna. They certainly appear different. I had the same curiosity until recently when I acquired and installed a Gap model Eagle DX antenna.

The Eagle DX is the smallest of the Gap vertical family with a height of 21 ft. and a weight of just 11 lbs. It covers 40, 20, 17, 15, 12, and a 500 khz portion (adjustable) of 10 meters with less than a 2:1 vswr specification. At the base of the antenna are three 80 inch rigid counterpoises.

I installed my antenna on a ground mounted 6 ft. pipe in concrete, with a tilt-over bracket for easy access and adjustment.

Assembly was straightforward and went well, but I did not fully tighten a connection to the 10 meter tuning rod thus causing an intermittent swr problem on this band only. The problem was quickly resolved, and the antenna met its swr specifications very nicely.

How the Gap Eagle Works

I was curious how this patented antenna works. The

Gap website,

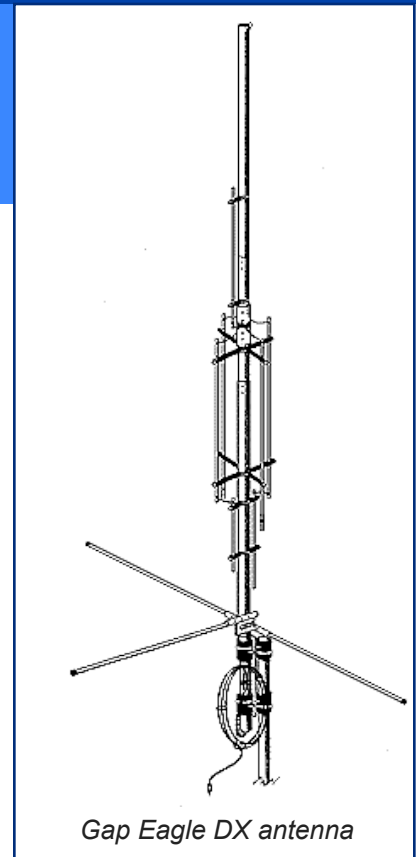
www.gapantenna.com, offers some information, but a better description required reading the patent document.

The Gap verticals employ a variation of a center fed asymmetrical vertical dipole antenna. Multiband operation is accomplished by utilizing seven, 1/2 inch diameter aluminum tuning rods mounted on short pvc insulators attached by stainless steel clamps around the antenna. Each tuning rod is pre-cut to length, and requires no adjustment.

This antenna is rated for legal limit on all bands except 40 meters where 100% continuous duty power is limited to 300 watts.

The antenna is fed with 52 Ohm coaxial cable. Five, one inch long ferrite sleeves are placed over the coax at the antenna input to form a choke balun. Inside the antenna is a specific length of 52 Ohm coax cable with a velocity factor of 0.68. In the center of the antenna is a 2 foot insulated section that connects the top and bottom sections of the antenna together.

At the center, the coaxial cable braid only, is completely severed, creating a Gap, (thus the name). Jumper wires with



terminal rings at the ends are routed from the severed braids, through the antenna wall, to the external tuning rods.

The center insulated wire of the coax, and remaining braid (24' 3") continues to the top of the antenna, to which it is connected via a 470 pf series capacitor. This 24 ft length of coax and series capacitor tunes, and matches the antenna on 40 meters.

Asymmetrical Vertical Dipole

So what is an asymmetrical vertical dipole? Picture a horizontal center fed dipole that has been rotated to vertical, with one leg above the other. Because one leg is nearer the ground, this leg has

See **Eagle**, continued on p. 5

more capacity to the earth than does the other.

To compensate, the antenna requires some additional measures, thus requiring the tuning rods, and counterpoises. Asymmetrical vertical dipole antennas are much more efficient than a ground mounted $\frac{1}{4}$ wave vertical with a less than ideal radial ground system.

Around the World

In South America, they are the choice of some AM broadcast stations because of this low loss, and because no real estate, and wire is required for a radial system. Gap antennas, advertise 90 percent efficiency. So how does the Gap Eagle antenna perform?

The Gap Eagle antenna functions as claimed. It is a dipole, and as such, has high voltage present on the ends when transmitting. The

difference in signal polarization is very apparent when using this antenna.

I can hear some mobile stations on the gap when they are in the noise on my 40 ft high horizontal doublet antenna. Some DX stations are stronger on the doublet, but the really distant DX, such as Japan, Australia, New Zealand and the South Pacific are usually stronger or equal, on the Gap.

Sometimes the higher latitude stations such as Alaska are much, much stronger on the Gap. This is likely due to the signal's arrival angle.

The Gap is well made, and thus far has worked well. It is also very neighbor friendly, and is completely out of sight in my back yard. Am I top dog in the DX pile ups? No, but if I can hear them, with patience and a little luck, I can usually work them.

Traffic Stats

RARS Two Meter Traffic/Ragchew Net

Check-ins: 562

Traffic: 36/30

Minutes: 570

Sessions: 31

Special Interest Nets

Check-ins: 105

Minutes: 360

Sessions: 10

Field Day 2012

RARS finished first in the 9A category, with a score of 12,998, and 25th overall. A total of 4,017 QSOs were made by 102 participants in this year's Field Day event. The club operated under the W4DW call sign, and the GOTA (Get on the Air) callsign was W4RNC.

2013 Events, Hamfests & Conventions

Greenwood Hamfest | Jan. 12

Location: Greenwood, SC

Website: <http://w4gwd.org>

Charleston Hamfest | Feb. 2

Location: North Charleston, SC

Website: <http://www.wa4usn.org>

Frostfest | Feb. 2

Location: Richmond, VA

Website: <http://www.frostfest.com>

NC QSO Party | Feb. 24

Website: <http://www.rars.org/ncqsoparty>

2013 Charlotte Hamfest™ | Mar. 8-9

Location: Concord, NC

Website: <http://www.charlottehamfest.org>

Raleigh Hamfest | Mar. 30

Location: Raleigh, NC

Website: <http://www.rars.org/hamfest/>

Upstate Hamfest | May 4

Location: Spartanburg, SC

Website: <http://brars.org>

Dayton Hamvention® | May 17-19

Location: Dayton, OH

Website: <http://www.hamvention.org>

Mid-Summer Swapfest | Jul. 20

Location: Cary, NC

Website: <http://www.qsl.net/n4nc/swapfest.html>

Minutes

Board of Directors Meeting Raleigh Amateur Radio Society October 16, 2012

Present: Bob KI4YXM, Chuck K4HF, Chuck W3WZN, Bob W4TTX, Karl W4CHX, CJ NC4CJ, John AI4RT, Don WA4AVU, Ken KI4OTO.

Guests: Daniel W3WDD

Apologies and/or emailed reports: Marty W4MY, Jack N6UYB

1. **Call to order (Karl W4CHX):** Karl W4CHX called the meeting to order at 7:05 PM.
2. **Approval of minutes (Karl W4CHX):** After discussion, the Minutes of the September 18, 2012 meetings of the RARS Board were approved.
3. **Vice President's report (CJ NC4CJ):** CJ made her report under new business.
4. **Treasurer's report (Greg KE4PAX):** No Report
5. **Secretary's report (Bob KI4YXM):** No Report
6. **Committee reports:**
 - a. **Public Service Director (John AI4RT):** Reminded the board of the last two events for the year. City of Oaks Marathon on November 4th and Making Room for Turkey Ride on November 18.
 - b. **Public Information Officer (Chuck W3WZN):** No Report
 - c. **Education Director (Virginia NC4VA):** No Report
 - d. **Field Day Chair (Bob W4TTX):** Waiting for scores.
 - e. **FM Repeater Chair (Karl W4CHX):** Karl W4CHX thanked Cliff W4FT for his efforts on the RARS repeater projects. He then provided an update on the installation of the 145.13 repeater at the RTP tower site, and the replacement of the building at the Bayleaf

tower site. Briefly, the 145.13 repeater and duplexer have been repaired by Danny K4ITL. They will be installed in a rack and transported to the RTP repeater site for the remaining installation steps. Cliff W4FT is working on obtaining permits for replacing the building at the Bayleaf repeater site.

- f. **RARSFest Chair (John AI4RT):** Next organizational meeting on scheduled for October 29.
- g. **Exciter Chair (Cathy KA3QPU):** Via Don WA4AVU: Cathy KA3QPU needs articles.
- h. **Hospitality Chair (Mary Jo K4MJL):** No Report
- i. **Net Manager (Mary KG4OQA):** No Report
- j. **ARRL Liaison (Chuck K4HF):** Chuck K4HF reviewed the changes the FCC is making in the rules. Briefly, passing an exam element will now be good for life. This means if one fails to renew within the grace period, they can apply for a new license without having to be retested. Details of this and other actions are in QST.
- k. **At-Large Director (Don WA4AVU):** No Report
- l. **At-Large Director (Ken KI4OTO):** No Report
- m. **At-Large Director (Jack N6UYB):** Based on his email communication, Jack N6UYB has no report.
- n. **W4DW/W4RNC Trustee (Jeff AC4ZO):** No Report
- o. **RARS VE Coordinators (Joe WA4GIR and Liz KO4CK):** No Report
- p. **RARS Webmaster (Hank K4HM):** No Report

See **Board Meeting Minutes**, continued on p. 7

- q. **North Carolina QSO Party (Marty W4MY):** Based on his email communication, Marty W4MY reported, that the NC QSO Party (NCQP) website is fully functional at www.rars.org/ncqsoparty/. The link from the RARS main page is active. On October 16, 2012, Marty W4MY will be making an award presentation to the Azalea Coast ARC in appreciation of activating the USS North Carolina during the last NCQP. On December 1, 2012, Marty W4MY plans to give a presentation on the NCQP at the quarterly QCWA meeting. The next NCQP committee meeting will be held on December 8, 2012 in Graham, NC. The N1MM logging program has been updated to include the new NCQP. Finally, the 2013 NCQP will be held on February 24, 2013 from 10:00 a.m. – 8:00 p.m. EST.

7. **Old Business:**

- a. **New award for RARS members (Ken KI4OTO):** Continued to next month.
- b. **Insurance coverage for RARS (Greg KE4PAX):** Continued to next month.

8. **New Business:**

- a. **RARS meeting date for January 2013 (CJ NC4CJ):** The first Tuesday of January is 1/1/13. Due to the holiday, we will try to move the meeting to 1/8/13 (the second Tuesday of January 2013) and cancel the RARS dinner. The RARS Board meeting will be 1/15/13 as currently scheduled. We must get approval from church prior to making this change (action CJ). Bob W4TTX made a motion to move the general membership meeting to 1/8/13. Seconded by Chuck W4HF. Motion passed.
- b. **Thanks to Richard Kelly-Crapse, KB4TKQ (CJ NC4CJ):** CJ NC4CJ wishes to acknowledge Rick's job as auctioneer at the RARS Auction in October.
- c. **RARS Board Meeting location (Karl W4CHX):** Karl W4CHX reported that RARS Board meetings will continue to be located at the medical office of Bob W4TTX until other arrangements are made. The address for his medical practice is Internal Medicine Associates of Raleigh, P.A., 3850 Ed Drive, Suite 100, Raleigh, NC 27612.

9. **Any other business:** No other business.

10. **Board member's comments:** None recorded.

11. **Adjournment (Karl W4CHX):** The meeting was adjourned at 8:10 p.m.

New RARS Members

Wil Bolton III	KK4MOZ
Lee Miller	AK4XZ
Frank Barnes	W4NPN

December Birthdays

Jack	WB6JZY	12/01
Rick	K4RLE	12/01
David	KB8V	12/01
Randy	KE4PNT	12/06
Ronnie	W4RJF	12/06
Dave	K4ITM	12/07
Frank	W4CWA	12/08
Virginia	NC4VA	12/09
Bruce	KC4UQN	12/09
Clyde	WB2EYC	12/10
Mike	WA4BPJ	12/11
Ebb	W3EPA	12/13
Sam	KI4TRG	12/13
Conner	KE4ZNS	12/15
Cliff	W4FT	12/17
Roger	W3EZR	12/18
Gizmo	KK4BVR	12/18
James	KE6FNW	12/20
Bert	W4FMN	12/21
David	KG4RIY	12/27
Michael	KK4EIB	12/27
Dick	KD4ISC	12/31
Katie	KE4DRL	12/31
Gerry	K4GCJ	12/31

Minutes

General Membership Meeting Raleigh Amateur Radio Society November 6, 2012

1. Call to order: Karl W4CHX called the meeting to order at 7:31 p.m.
2. Approval of minutes: The Minutes of the RARS General Membership meeting on October 2, 2012 were approved.
3. Vice President's report (C.J. NC4CJ): see her report in Other Business.
4. Treasurer's report (Greg KE4PAX): RARS currently has 279 members. If any RARS member has any questions, please contact Greg KE4PAX or Karl W4CHX for further information.

5. Announcements (Karl W4CHX):

- a. Upcoming RARS events and hamfests: Karl W4CHX reminded everyone to review the Exciter and/or RARS website for announcements of upcoming events.
- b. After meeting gathering: The after meeting gathering will be held at Applebee's at Six Forks and Wake Forest road.
- c. Guests: the guests were introduced: Justin Bealo, N4RDU; Lee Miller, AK4XZ; Kelly Shelley, KS6Z; and Chris Jerkin (no call).

6. Report from RARS Board Members.

- a. Public Service and RARSfest 2013 (John AI4RT): John AI4RT asked for volunteers for the upcoming "Makin' Room for Turkey" ride and for RARSFest 2013.
- b. 2012 Field Day results: Based on the email received from Bob W4TTX, Karl W4CHX reported that RARS finished 1st place in class 9A with 12,998 points and we were 25th overall.
- c. Election for officers and board members for 2013 (Chuck K4HF): Chuck K4HF read the list of nominees for RARS officers and board members for 2013 (see list below). He asked for any nominations from the floor. Since there were no nominations, Chuck K4HF asked for a

motion to close the nominations. The motion was made, seconded, and approved by vote of the members. Chuck K4HF asked for a motion allowing the Secretary to cast one vote to approve the slate of nominees. The motion was made, seconded, and approved by unanimous vote of the members. The following individuals were elected for the officer and board member positions:

RARS officers for 2-year terms

Vice President	C.J. Orr, NC4CJ
Treasurer	Greg Seamster, KE4PAX

RARS Board members for 1-year term

Public Service Director	John Snellen, AI4RT
Public Information Officer	Ken Rudder, WA4JJW
2013 Hamfest Chair	John Snellen, AI4RT
Exciter Editor	Cathy Downs, KA3QPU
Net Manager	Mary Holtschneider, KG4OQA
At-Large Director	Don Downs, WA4AVU
At-Large Director	Jack Foster, N6UYB
At-Large Director	Bill Mars, AK4BL
FM Repeater Chair	Karl Bowman, W4CHX
W4DW, W4RNC,	
N4RAL Trustee:	Jeff Wittich, AC4ZO
ARRL Liaison:	Chuck Littlewood, K4HF
Education Director:	Murray Merner, K4MHM
RARS Webmaster	Hank Montgomery, K4HM

RARS Committee Chairs for 1-year term

Hospitality Chair	Charlie Swindell, WB4DCM
Food Service Chair:	Joanne Mars, AK4RJ
NC QSO Party Chair:	Marty Young, W4MY
2013 Field Day Chair:	Bob Starkenburg, W4TTX
VE Team Coordinators:	Liz White, KO4CK
	Joe White, WA4GIR

7. Other business: C.J. NC4CJ reviewed the format for the December meeting.
8. Program: The program titled "Maker Faire" was presented by Woody Woodward, K3VSA. The topic was well received and there were questions afterwards.
9. Adjournment: The meeting was adjourned by Karl W4CHX at 8:48 p.m.

LOCAL AMATEUR RADIO NETS

The **Apex Emergency Response Communications Net** meets weekly each Sunday at 9 p.m. on the 146.640 repeater. The purpose of the net is to assist ham radio operators in preparing to respond to emergencies, test their equipment, improve operating skills, pass traffic, and to provide those with a common interest an opportunity to meet. The Apex ERC Net provides amateur radio emergency communications for The Church of Jesus Christ of Latter-Day Saints' disaster relief efforts. All stations are invited to participate in this net.

Please join us on the **Carolina 440 Net** every Monday night at 7:30 p.m. This ragchew net utilizes the Carolina 440 UHF Link Repeater System. Comprised of the Raleigh, Down East, and Coastal Wilmington link systems, there are currently 19 repeaters on the system, covering 21,168 square miles. For a list of these repeaters, please visit www.carolina440.net.

Please join us each Tuesday at 9:15 p.m. on the 146.880 repeater for the **Central Carolina SKYWARN** net. On each net there are announcements, check-ins by county, and often a program or training spot. Check us out at www.centralcarolinaskywarn.net.

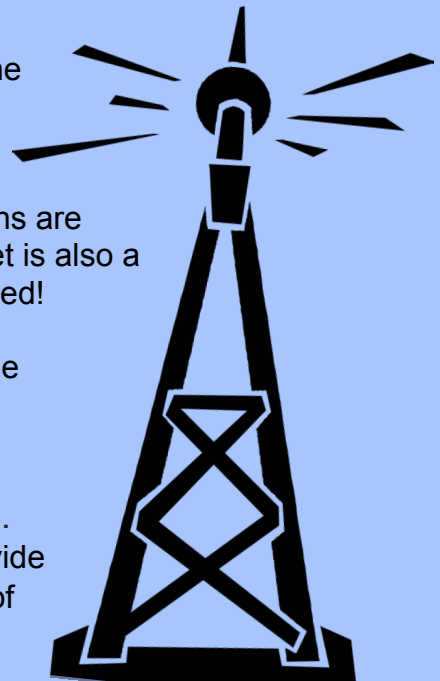
The **PCTN (Piedmont Costal Traffic Net)** meets daily at 9 p.m. on the 146.880 repeater. The purpose of the net is to handle/pass NTS formal messages. Amateur stations are encouraged to check in and participate. The backup repeater is the 147.105 (PL tone 82.5).

The **RARS Technical & Trader's Net** is held on Saturday evenings on the 146.640 repeater at 8:30 p.m.

Join us every evening at 8 p.m. on the 146.640 repeater for the **RARS Two-Meter Net**. You can give a ragchew, check in and out (this counts for our total numbers reported to the ARRL!), make announcements, and pass traffic. We also offer National Traffic System traffic training. All licensed stations are welcome to participate in the net as often as they can. This net is also a great way to learn about amateur radio if you are newly licensed!

The **VOIP Hurricane Net** is held Sundays at 00:00 UTC on the 146.775 repeater with a tone of 88.5 (IRLP node 4260). For information about activation details, go to www.voipwx.net.

The **Wake County ARES Net** meets Thursdays at 9:15 p.m. (after the PCTN TrafficNet) on the 146.88 repeater. We provide discussion and training for the implementation and provision of emergency communications for our served agencies, such as the American Red Cross and the local and state Emergency Operations Center. Please join us. For more information please visit <http://www.wakeares.org>.



RARS Classifieds

RARS Members: [Post](#) a new 30 day listing or [Edit](#) your current listings. The items below were listed within the last 30 days.

MFJ Model 1798 80 thru 2 Meter Vertical Antenna, etc.

Posted November 24th, 2012 by: K4HF
Contact: k4hf@arrrl.net

This vertical antenna is almost completely assembled but never used. Health reasons caused the owner to curtail his ham activities. Radials are not required as a counterpoise system is included as is the original manual. Asking \$125. A new Glen Martin RT-936 heavy duty four sided 9' roof top tower is also available. Contact Chuck by E Mail, preferred, or (919) 872-6555.

AL-811H 800 Watt Amplifier

Posted November 22nd, 2012 by: NC4EN
Contact: richmitc@gmail.com

AL-811H 800 Watt Amplifier for sale. It works. I used it just today, but I have bought an ALS-1300. I have the original box and manual. It is wired for 120V and I have made the 10M modification. \$550. Please email me to arrange to make payment and take delivery.

Misc Equipment for Sale

Posted November 12th, 2012 by: NC4EN
Contact: richmitc@gmail.com

The prices are firm and in cash as I will go auction otherwise. If you want one of these items, please email me, nc4en@arrrl.net or richmitc@gmail.com, and we'll make arrangements.

LDG AT-1000Pro Autotuner. \$300.

Works great except the lamp for the meter doesn't work. There is a YouTube video on how to fix it. I just haven't done it. I've had it since November 2011.

MFJ-962D Versa Tuner III. \$150. A 1500 Watt PEP SSB manual tuner. I got it mainly to tune my hex beam as needed. Right now, I am just using it basically as an antenna switch. Time to stop that. I've only had it since May 2012.

MFJ-993B Autotuner. \$100. A 300 Watt SSB / 150 Watt CW tuner. Again the lamp doesn't work on this one but the tuning does.

MFJ-931 Artificial Ground. \$50.

I am fairly certain I have the boxes and manuals for all of the above. They are in great shape but do have some minor scratches and such.

MFJ-905 6 Meter Tuner. \$50. I bought this from Hank and never used it. No manual or box.

Ten Tec 1208 6 Meter Transverter. \$75. I bought this as well from Hank but never used it. No manual or box.

Yaesu FT-1500M 2 Meter Transceiver. \$75. I bought this from Al when I first started in 2010. I may have the manual and box. I do have a MH-48 microphone for it.

Want to be a Published Writer?

Everyone has a favorite aspect of amateur radio. From contests to antenna building, there's something for everyone. Why not share your interests, expertise, and experience with RARS in the *Exciter*? We welcome member and non-member/affiliate submissions.

Both technical and non-technical articles are needed for the *Exciter*. You could write up a quick column on QSL cards or a longer how-to piece on setting up a new shack. And don't feel pressured to write a novel; articles of all sizes are appreciated!

To submit an article, simply email your piece to the Editor (editor@rars.org). Please also feel free to attach pictures to accompany your article. It is helpful if you add captions and identify the people in photographs, and have their permission to use their image.



RARS Classifieds

Want to add a new radio to your shack? Have an antenna for sale? Browse the RARS classifieds for new and used radio equipment at <http://rars.org/classifieds.php> or see p. 10 of this newsletter for current listings.

RARS members may post notices about equipment they are selling. Posts last for 30 days and are editable at any time.

Using our classifieds is a great way for buyers to search for available items and for sellers to reach a local, targeted audience.

The Raleigh Amateur Radio Society's

EXCITER

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